

REMARKS

Claims 1-16 are pending in the present application. Claims 1-3 and 7-10 were previously withdrawn from consideration as drawn to a non-elected group. By virtue of this response, claims 4, 6 and 11 have been amended, claim 5 has been canceled and claim 17 has been added. Accordingly, claims 4, 6 and 11-17 are currently under consideration. Claim 4 has been amended to recite method of inhibiting paraptotic cell death in a mammalian neural cell. Support for the amendment of this claim can be found in the bridging sentence between pages 14-15 and also in previously presented claim 5. Claim 6 has been amended to correct the dependency on now canceled claim 5 to pending claim 4. Claim 11 has been amended to recite a method of treating a neurodegenerative or ischemic condition associated with excessive cell death. Support for the amendment of this claim can be found on page 14 at lines 23-27. Claim 17 has been added to recite specific neurodegenerative conditions. Support for this new claim can be found on p. 15 at lines 2-3.

With respect to claim amendments and cancellation, Applicants have not dedicated or abandoned any unclaimed subject matter and moreover have not acquiesced to any rejections and/or objections made by the patent office. Applicants expressly reserve the right to pursue prosecution of any presently excluded subject matter or claim embodiments in one or more future continuation and/or divisional application(s).

Claim Rejections Under 35 U.S.C. § 112

The Examiner has rejected claims 4-6 and 11-16 under 35 U.S.C. 112, first paragraph, for allegedly failing to comply with the enablement requirement. Applicants respectfully traverse this rejection. However, in the interest of expediting prosecution, claims 4 and 11 have been amended. Claim 4 has been amended to recite method of inhibiting paraptotic cell death in a neural cell in a mammal. Claim 11 has been amended to recite a method of treating a neurodegenerative or ischemic condition associated with excessive cell death. In view of the amendments, Applicants believe the rejection under 35 U.S.C. 112, first paragraph for an alleged lack of enablement is

rendered moot. Accordingly, Applicants respectfully request that the Examiner withdraw this rejection.

Claim Rejections Under 35 U.S.C. § 102(a)

The Examiner has rejected claims 4 and 5 under 35 U.S.C. 102(a) as being allegedly anticipated by Bennett et al., *Proc. Nat. Acad. Sci. (USA)* vol. 98, no. 24, (2001).

Applicants respectfully traverse this rejection. The Bennett PNAS reference attempts to elucidate the effects of various small molecules in the anthrapyrazolone family on expression of inflammatory cytokines. Various types of immune cells were used for the testing. The reference does not teach how to inhibit paraptotic cell death. Nor was there any evidence that any paraptosis was taking place in the experiments described in this reference.

In the Office Action mailed on 9/6/05, the Examiner stated that the ability to inhibit JNK pathway is necessarily present in SP600125. Applicants do not dispute this point. However, Applicants respectfully note that the Bennett PNAS reference also teaches that SP600125 also had inhibitory activity against COX-2, IL-2, IFN-gamma, TNF-alpha, IL-10, as well as MMP gene expression (first paragraph of the Discussion section on p. 13685). The claims do not recite that the JNK pathway is inhibited. Rather, the claims recite that paraptosis is inhibited. The instant specification teaches on page 8 that paraptosis can be induced by IGFIR (Insulin-like Growth Factor I Receptor) and can be mediated by caspase-9. As such, there are multiple signaling pathways that result in the end result of paraptosis. The claims are directed to the end result of inhibiting paraptosis (as amended, in mammalian neural cells), which is not taught by the description in the Bennett PNAS reference. Applicants respectfully note that there has been no teaching provided that inhibition of the JNK pathway, alone, necessarily leads to inhibition of paraptotic cell death.

In the interest of expediting prosecution, Applicants have amended claim 4 to recite method of inhibiting paraptotic cell death in a mammalian neural cell and canceled claim 5.

In view of the foregoing, the Applicants respectfully request that the Examiner withdraw this rejection.

Claim Rejections Under 35 U.S.C. § 102(e)

The Examiner has rejected claims 4-6 and 11-16 under 35 U.S.C. 102(e) as allegedly being anticipated by Bennett et al., US Patent Application No. 10/395,810 (Publication No. 2004/0072888).

Applicants respectfully traverse this rejection. The Bennett patent application (US 2004/0072888) does not teach each and every element of the claims. The Bennett patent application describes the synthesis of a large group of pyrazoloanthrone derivatives. The Examples section describes using Compound 1 to test for its effects on TNF-alpha production, leukocyte recruitment, inhibition of paw swelling in a rat model of arthritis and inhibition of seizures. When read as a whole, the patent application teaches synthesis of compounds and possible effects on various parameters associated with inflammation.

On page 6 of the Office Action mailed on 9/6/05, the Examiner states that this Bennett patent application “teaches the use of SP600125 for treatment of conditions, including human diseases, involving programmed cell death.” Applicants respectfully request that the Examiner point out exactly where in the specification one can find this teaching. Paragraphs 83-88 discuss methods of using pyrazolone derivatives for treating a laundry list of diseases. However, SP600125 is not specified explicitly as being used to treat these diseases. Given the number of R groups and the substitutions that are taught in the specification, one of skill in the art would not be able to pick out one of possibly hundreds or thousands of derivatives from this generic group and match it with the long list of conditions recited in paragraphs 83-84. As such, the Bennett patent application does not recite every element in the present claims and, as such, does not anticipate the instant claims.

In the interest of expediting prosecution, Applicants have amended claim 4 to recite method of inhibiting paraptotic cell death in a neural cell in a mammal, canceled claim 5 and

amended claim 11 to recite a method of treating a neurodegenerative or ischemic condition associated with excessive cell death.

In view of the foregoing, the Applicants respectfully request that the Examiner withdraw this rejection.

Claim Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 6 and 11-16 under 35 U.S.C. 103(a) as being allegedly unpatentable over Bennett et al., *Proc. Nat. Acad. Sci. (USA)* Vol. 98, No. 24, (2001) as applied to claims 4 and 5, and in further view of Braun et al., *Expert Opin. Investig. Drugs*, 1599-1610 (1999).

Applicants respectfully traverse this rejection. The Braun reference focuses on apoptosis. As is made clear in the specification, for example on pp. 10-11 and in Figures 3-5, apoptosis and paraptosis are distinctly different biological phenomena. The Bennett PNAS reference discusses a group of compounds that might have some effects on inflammatory cytokines. As such, one of skill in the art would not have found any predictable results if combining these two references because one taught a group of compounds with some effects on inflammatory cytokines and the other reference taught apoptosis in the brain. Accordingly, the instant claims are not rendered obvious by these two references if combined.

In view of the foregoing, the Applicants respectfully request that the Examiner withdraw this rejection.

CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 420052002700. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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